

SST BEAMLINE COMMISSIONING READINESS

Doc No. BL-SST-002 Rev: B

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Rev Date: 02/05/2018
Author: Conan Weiland
Approved: 02/05/2018

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| Serial No | Part No | Part Rev | ECN | Rev | ECN | Rev |
|--------------------|---------|----------|-----|-----|-----|-----|
| | | | | | | |
| Deviation & Waiver | : | | | | | |

OP Description Name/Life # Date DR 10 This traveler shall be completed by the Beamline Group Leader, to verify the beamline is accepted and ready for commissioning Dar Fjorth F5617

Discrepancy Reports (DR's) occurring during the completion of this traveler shall include a justification for proceeding with commissioning, be approved by the Photon Division Director, and summarized in operation #140 "COMMISSIONING READINESS SUMMARY"

20 BEAMLINE COMPONENTS/EQUIPMENT

A. Verify acceptable completion of the following travelers:

Dan Foch 2/15/2013

| BL-SST-001, SST Photon Delivery System |
|--|
| Acceptance Testing |
| ∠BL-SST-003, Lead Brem Shielding 1 |
| L-SST-003, Lead Brem Shielding 2 |
| BL-SST-003, Lead Brem Shiedling 3 |
| BK-SST-004, SST Vacuum Switches |
| BL-SHLDP-001, Shielded Beampipe |
| Acceptance Testing L Branch |
| BL-SHLDP-001, Shielded Beampipe |
| Acceptance Testing M Branch |
| BL-PPS-001 PPS Aperture Installation |
| BL-PSH-001, Photon Shutter 1 |
| BL-PSH-001, Photon Shutter 2 |
| BL-PSH-001, Photon Shutter 3 |
| ✓BL-PSH-001, Photon Shutter 4 |
| BL-PSH-001, Photon Shutter 5 |
| BL-PSH-001, Photon Shutter 6 |
| ✓ BL-PSH-001, Photon Shutter 7 |
| → BL-PSH-001, Photon Shutter 8 |
| BL-PSH-001, Photon Shutter 9 |
| Inspection Test Report - Bellows Shields |

B. Verify all DR's/NC's associated with above travelers are closed



closed

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| ОР | Description | Name/Life # | Date | DR |
|----|--|----------------------|---------------------|----|
| 25 | END STATION COMPONENSTS | Dan Fisher F5613 | 2/14/2018 | |
| | A. Verify acceptable completion of the following travelers: | 499.3 | 7 1 | |
| | ▶ BL-ES-001 End Station (HAXPES)▶ BL-ES-001 End Station (NEXAFS/XPS) | | | |
| | B. Verify all DR's/NC's associated with above travelers are closed | | | |
| 30 | RADIOLOGICAL INTERLOCK CERTIFICATION | Dan Fischer | 2/6/2018 | |
| | Verify acceptable completion of the Radiological Interlock Certification Checklist # NSLSII-7ID-CHK-001 | F5613 | 57 5747 | |
| 40 | EQUIPMENT PROTECTION SYSTEM | Dan Flocker | 2/5/2018 | |
| | A. Verify acceptable completion of traveler: BL-EPS-002, SST Equipment Protection System | F5613 | 2/3/4078 | |
| | B. Verify all DR's/NC's associated with above traveler are closed | | | |
| 50 | STANDARD VACUUM EQUIPMENT | Dan Fischer | 2/-6 - | |
| | A. Verify acceptable completion of traveler BL-VA-002 | Dan Fisches F5013 | 2/5/2018 | |
| | B. Verify all DR's/NC's associated with above traveler are closed | | | |
| 60 | HUTCHES | Danfischn F5613 | 1/- 1/- 1/- 1/- 1/- | |
| | A. Verify acceptable completion of traveler HU-001 (Hutch A) | F2913 | 2/5/2018 | |
| | B. Verify all DR's/NC's associated with above traveler are closed | | | |
| 70 | MECHANICAL UTILITIES | Dan From F5013 | 2/5/2018 | |
| | A. Verify acceptable completion of traveler BL-UT-001 | £2813 | | |
| | B. Verify all DR's/NC's associated with above traveler are closed | | | |
| 80 | ELECTRICAL UTILITIES | Don Fich | 2/5/2018 | |
| | A. Verify acceptable completion of traveler BL-UT-002 | F2913 | 7 . 7 | |
| | B. Verify all DR's/NC's associated with above traveler are | | | |



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| OP | Description | Name/Life # | Date | DR |
|-----|---|-----------------------|-----------|----|
| 90 | DI WATER BALANCING | Danfisch | 2/5/2018 | |
| | A. Verify acceptable completion of traveler BL-UT-005 | E2913 | α / 3/311 | |
| | B. Verify all DR's/NC's associated with above traveler are closed | | | |
| 100 | PPS SWITCH INSPECTION | Dan Fisch | 2/5/2018 | |
| | A. Verify completion of Inspection Test Report | Den FIJLEN F5013. | ~/3/24/0 | |
| | B. Verify all DR's/NC's associated with above traveler are closed | | | |
| 110 | CRYOGENICS AND OXYGEN DEFICIENCY HAZARD | Dan Fireth F5013 | 2/5/2018 | |
| | A. Verify acceptable completion of the following travelers | E2813 | 7.7 | |
| | BL-UT-004 Beamline Liquid Nitrogen Acceptance Testing BL-MON-007 Cryo-Cooler Installation | | | |
| | B. Verify all DR's/NC's associated with above travelers are closed | | | |
| 120 | NETWORK UTILITIES | Dan Fischer FS 613 | 2/5/2018 | |
| | Verify the following: | E2013 | | |
| | - Fiber optic connection to the core is terminated and tested - Beamline switches are installed | | | |

- Network is connected to NSLSII controls network



Specifically verify the following:

/ insulated copper wire.

bonding conductor.

_____ All bonding conductors are bare copper or green

All bonding connections require a tool to remove.
All bonding connections are visible from the main

personnel aisles. There are no hidden connections. Solder is not used as a method of connection for any

The minimum wire size for bonding is 10 AWG. For DC circuits, NEC table 250.122 has been applied using the DC current maximum in place of the current rating.

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| ОР | Description | Name/Life # | Date | DR |
|-----|---|----------------|--------|----|
| 130 | GROUNDING - This step shall be performed by Electrical Engineering Group Personnel | ALBORNEN/20202 | 2/6/18 | |
| | Verify all equipment is bonded to a system ground by a low impedance connection in accordance with NEC 250.4(A)(3). | | | |
| | This applies to every piece of equipment which has electrical connections, as well as any equipment where wiring is in contact with or in proximity to. | | | |



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| OP | Description | Name/Life # | Date DR | |
|-----|--|-------------------|---------------|--|
| 140 | COMMISSIONING READINESS SUMMARY Check one: | Durtsche +5012 | 2/15/2018 | |
| | This beamline is accepted and ready to start commissioning - all steps in this travelers are complete | | | |
| | This beamline is conditionally accepted and ready to start commissioning. The table below is a summary of the open (approved) DR's and includes, its required action, due date, and justification why commissioning can proceed. | | | |
| | DR REQUIRED ACTION | DUE DATE | JUSTIFICATION | |
| | | | | |
| 150 | Verify all Descrepancy Reports for this traveler are closed | | | |
| 160 | Forward this completed traveler to Quality Assurance | | | |



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| OP | Description | Name/Life # | Date | DR |
|-----|--|-------------|------|----|
| 170 | REVISION HISTORY (This step is informational and does not require signoff) | | | |
| | Rev - Description - Date B First Release | | | |